

## CURRENT STATUS OF THE CLAIMS

### In the Claims

The following is a marked-up version of the claims with the language that is underlined (“\_\_\_”) being added and the language that contains strikethrough (“—”) being deleted:

1-44 (CANCELED)

45. (CURRENTLY AMENDED) A method of metallizing a nanostructure, comprising the steps of: forming a nanosphere; exposing the nanosphere to Cu (II) acetylacetonate; metallizing the nanosphere with ~~a metal~~ copper; and forming a metallized nanosphere that has been metallized with the ~~metal~~ copper.

46. (CANCELED)

47. (ORIGINAL) The method of claim 45, wherein the step of forming the metallized nanosphere, includes the step of forming a metallized copper nanosphere that has been metallized with about 3 weight percent copper.

48. (CANCELED)

49. (CANCELED)

50. (ORIGINAL) The method of claim 45, wherein forming the nanosphere includes the step of forming a nanosphere under thermal conditions.

51. (PREVIOUSLY PRESENTED) The method of claim 50, wherein the step of forming the nanosphere under thermal conditions comprises the step of forming a nanosphere in the temperature range of about 800 °C to about 1500 °C.

52. (ORIGINAL) The method of claim 45, wherein forming the nanosphere includes the

step of forming a nanosphere under non-catalytic conditions.

53. (CANCELLED)

54. (PREVIOUSLY PRESENTED) A method of preparing a nanosphere, comprising the steps of:

providing at least one composition selected from the group consisting: of a metal composition, a metal oxide composition, and combinations thereof, wherein the metal of the metal composition and the metal of the metal oxide are selected from the group consisting of: tin, chromium, iron, nickel, silver, titanium, cobalt, zinc, platinum, palladium, osmium, gold, lead, iridium, molybdenum, vanadium, and aluminum;

exposing the composition to thermal conditions of about 800°C to about 1500°C and at a pressure from about 200 to 650 Torr;

vaporizing the composition while flowing an inert gas over the composition;

forming a plurality of substantially monodisperse metal oxide nanospheres via a condensation reaction under non-catalytic conditions; and

metallizing the nanosphere with a metallization metal selected from the group consisting of: tin, iron, nickel, silver, cobalt, platinum, aluminum, and copper by contacting the nanospheres with a solution including a metallization metal complex.